

# **Workshop #1: Vulnerable Populations & Planning Considerations for the 2020 Hurricane Season**

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After-Action Report (AAR)

May-June 2020

Prepared by:

University of South Florida  
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## WORKSHOP #1 OVERVIEW

<b>Workshop Name</b>	Vulnerable Populations and Planning Considerations
<b>Workshop Dates</b>	Wednesday, May 27, 2020
<b>Scope</b>	Workshop conducted virtually through Zoom breakout sessions and asynchronously through Zeetings: <a href="http://www.zeetings.com/wieyusuf/0009-9601-0001">www.zeetings.com/wieyusuf/0009-9601-0001</a>
<b>Objectives</b>	Discuss disaster preparation and define vulnerable populations in the context of a compound hurricane-pandemic threat.
<b>Threat or Hazard</b>	Compound threat from tropical cyclones during the 2020 Atlantic hurricane season and a global health emergency from the COVID-19 pandemic.
<b>Scenario</b>	A major hurricane triggers a large-scale evacuation across a regions, requiring county and municipal governments to open emergency shelters.
<b>Sponsor</b>	CONVERGE COVID-19 Working Groups <a href="https://converge.colorado.edu/resources/covid-19/working-groups">https://converge.colorado.edu/resources/covid-19/working-groups</a>
<b>Participating Organizations</b>	National, state and local emergency and disaster planners and responders, public health, policy makers, researchers, nonprofit agencies, community members, and others.
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## EXECUTIVE SUMMARY

This workshop shed light on the challenges and importance of adapting current hurricane season planning. Coexisting with COVID-19 will pose even more challenges for hurricane season responses. Suggested adaptations include identifying further shelter spaces to reduce the numbers of evacuees per building (for required social distancing), create isolation spaces to protect populations vulnerable to COVID-19, and quarantine those who are symptomatic. Some strategies being considered include modifying existing shelters (e.g. schools, by using classrooms) and using hotels, dormitories, and other large vacant spaces (e.g., stores and convention centers).

Along with identifying new shelter options comes modifying procedures for screening, triage, and enforcing social distancing and other prevention methods in shelters, as well as transportation considerations. The additional burdens on the population due to COVID-19— economic, psychological, social, health, and workforce—create an even greater need for collaboration between nonprofit social service organizations and public health agencies. The current burden of COVID-19 on the public health, emergency, healthcare, and volunteer workforce is also a concern; strategies to protect workers from COVID-19 and to identify additional staff are being considered. Effective public messaging will also be crucial moving forward.

Workshop participants identified many subpopulations who would be considered vulnerable in this compound hurricane-pandemic scenario. The more typical vulnerable populations still exist based on the impacts of a hurricane: individuals in evacuation zones with inadequate or unsafe housing and low incomes; with disabilities or sensory impairments, mental health, or substance dependence; and who experience social bias or racism, domestic violence, and other exploitation. These vulnerable populations are compounded by those who are vulnerable to COVID-19 complications, including immunosuppressed individuals, the elderly, pregnant women, infants, and others with chronic conditions such as asthma or COPD.

Additional considerations will need to be made for mixed-age families, as well as caregivers and family members of the aforementioned vulnerable groups if isolation is a strategy. General approaches being considered are creating vulnerable population registries and pre-registration for all evacuees to identify sheltering needs upfront and triaging to different shelter types based on those identified needs. However, it was brought up that any evacuee could be considered at risk for, or a carrier of, COVID-19; plans will have to factor that in.

## 1.1 BACKGROUND AND OBJECTIVES

On Wednesday, May 27, 2020, stakeholders gathered virtually to participate in the first introductory workshop of the 2020 CONVERGE NSF Working Group Stakeholder Conversations on Evacuation Transportation and Sheltering Operations during a Pandemic. Workshop #1 had 192 registrants from 19 states, 9 universities and various disciplines that included public health, nursing, engineering, public administration, emergency management, public policy, aging studies, and graduate studies. Registrant roles included emergency managers, government employees, environmental consultant, chief fire operation, researchers, disaster specialist, analyst, and healthcare practitioners. In addition to 198 total individuals who participated in the Zoom meeting, 5 additional individuals joined an asynchronous discussion on the Zeetings webpage.

Prior to attending, registrants expressed that their most important goals regarding vulnerable populations and planning for the upcoming hurricane season included: finding the best solutions for preparedness and evacuation planning to ensure the safety and resilience of these populations; appropriate shelter management especially the support for the shelter staffing; to address and manage communication regarding shelters and adherence to COVID-19 safeguards; and promotion strategies to strongly advise citizens the importance of planning ahead and deciding on shelter/evacuation plans during COVID-19 Pandemic. Moreover, registrants sought to understand the community needs and coordinate the evacuation process while maintaining social distancing standards for COVID-19. Example comments from the registration included:

*“To ensure the safety and resilience of these populations and to understand scientific/research and community needs.”* - Program Officer

*“Coordination of evacuation while maintaining social distancing standards. Managing shelter operations for vulnerable populations concurrent to COVID-19.”* - Deputy Emergency Manager

*“Proper management of information regarding shelters and their adherence to safeguards due to COVID-19 as well as promotion strategies to strongly advise citizens the importance of planning ahead and deciding on going to shelters only as a last resort, even more so now due to the pandemic.”* - Graduate Student

*“Ensure appropriate DMH [mental health] support for shelter staff and clients.”*  
- Non-Governmental Organization (NGO) Employee/Volunteer

*“Finding the best solutions to prepare for, address crisis situations, retreat, and recovery planning.”* - Chief Sustainability Strategist

## 1.2 DISCUSSION TOPICS AND QUESTIONS

Workshop 1 consisted of eight breakout groups that discussed current questions and issues related to the stages of hurricane preparedness and response, as well as how to define vulnerable populations during this current hurricane season in consideration of the COVID-19 pandemic situation. Breakout sessions were simultaneously moderated with the same overlying format:

- **Round One:** *What changes are being considered or underway based on the current state of preparedness planning?*
- **Round Two:** *What populations are most vulnerable? Why?*
- **Round Three:** *What issues are/will be impacting vulnerable populations?*
- **Round Four:** 2-minute question burst

## 1.3 PRELIMINARY QUALITATIVE DATA ANALYSIS

### Overall Key Considerations

Some of the preparedness planning issues that participants are currently considering included:

- **Key Consideration 1:** Identifying sufficient shelter space to protect people from hurricanes and COVID-19 simultaneously.
- **Key Consideration 2:** Establishing protocols for personal protective equipment (PPE) for staff and other strategies to prevent the spread of COVID-19 during evacuation and sheltering.
- **Key Consideration 3:** Enacting cross-scale, cross-sector coordination to staff the shelters and meet community needs.
- **Key Consideration 4:** Creating public messaging around evacuation and sheltering.

## 1.4 ROUND ONE: CURRENT STATE OF PREPAREDNESS PLANNING: WHAT CHANGES ARE BEING CONSIDERED OR UNDERWAY?

### 1.4.1 KEY CONSIDERATION 1: NEED TO IDENTIFY SUFFICIENT SHELTER SPACE TO SIMULTANEOUSLY PROTECT PEOPLE FROM HURRICANES AND COVID-19

One participant voiced the shared concern about moving people from unsafe locations (exposure to the storm) to another unsafe location (increased exposure to COVID-19 in a congregate shelter)

*“[Facing] a lack of space with building integrity, meaning that a lot of our buildings cannot stand a major hurricane. So, anytime we’re up above Category 2 wind fields, Category 3, 4 and 5 storms, we’re more of a preservation of life capacity and trying to figure out, with limited space, with limited places due to flooding, with limited places to sustain damage that would not put one person in a shelter, much less 500 people in a shelter at risk. We’re trying to figure out the cost-benefit of “Are we trying to preserve more life or are we trying to protect from COVID?”*”

Additional concerns included:

- Normal shelter needs vs. shelter needs with COVID-19:
  - PPE, isolation centers, screening, and testing.

- As shelter capacities are reduced for social distancing, it will require more shelter locations and staffing.
- Increased space requirements to maintain social distancing, but this reduces the capacity of existing shelters:
  - 40 square feet (sf) increased to 100 sf?

*"We have changed our planning from 20 sq ft per person to 60 sq ft per person. This means we will have to open more shelters to provide space."*

- Congregate sheltering would need 6-ft spacing on all sides, head-to-toe opposite directions down the line for cot spacing.
- Comparing the capacity of alternative sites to what has historically been used.
- Some shelters are not fit to be used in this pandemic.
- Airflow is a concern: *What is the cost for modifying alternative shelters (i.e., schools)?*
- Fewer buildings available in rural areas.
- Space with separate units for quarantine or isolation:
  - Need *isolation locations inside the shelters or will those showing symptoms have to be sent somewhere else?*
  - Individual rooms will be used for isolation facilities as hurricane season approaches.
- Ensuring all shelter spaces meet hurricane protection requirements:
  - Worried about Category (Cat) 2, 3, 4, and 5 storms.
  - For anything greater than a Cat 3, some localities do not have shelters with structural integrity to withstand.
  - Coastal regions are concerned about lack of space and building integrity.
  - Too few hurricane-hardened structures; may need to reach out to the construction sector.
  - *Can vacant stores withstand hurricanes?*

*"Lack of space with building integrity – a lot of buildings cannot stand a major hurricane. Anything above Cat 2 turns into a preservation of life capacity. So with limited space due to flooding and sustained damage, trying to figure out the cost-benefit of preserving more life or protecting from COVID-19. Have to be prepared to make a decision for overall safety of evacuee protecting from illness. Anything less than Cat 3 can probably social distance, but anything larger don't think we have the structural stability to maintain social distancing."*

- Sharing bathrooms and food complicated by COVID-19 in a shelter environment.

## Strategies

- Hotels:

- Example: After Hurricane Matthew - hotels were used to house families who were displaced (this can be used now, with more strategic measures).
- Revising all sheltering plans, not only vulnerable populations. Currently places the homeless population in hotels and they are looking into similar plans for hurricane sheltering. They are encouraging hoteling and are just beginning conversations.
- The idea of hotels/other shelter options is getting a “deer in the headlights” response.
- *Who pays for the hotels?*
- Some departments have already started having conversations with hotels (Virginia).
- Opinion that sheltering people in hotels might not be that costly comparatively (Virginia Beach). Most people will not evacuate the town; rather, might be better to use emergency funds to fund hotel spaces to allow evacuees designated rooms with separated bathrooms.
- Large vacant spaces:
  - Stores and convention centers.
  - Gyms and cafeterias.
  - Adapted schools and dormitories.
- Policies, procedures, and plans:
  - Pre-landfall evacuated sheltering. Identifying space requirements for social distancing and the related decline shelter capacities that necessitates an overall increased number of shelters and indicates the need for additional staffing and volunteers.
  - American Red Cross approved standards: participant was unsure if publicly available. Involves a completely new method: congregate and non-congregate.
  - In Seattle, a homeless drop-in center noted not as many intakes as previously. Letting a certain number of people in at a time, spacing people out, so not as many can stay each night. Balance of serving as many people as possible versus social distancing.
  - Coming up with a playbook for sheltering.
  - Shelters sometimes have restrictions on who can stay at the shelter and for how long.
  - Functional Assessment Support Teams (FAST teams) to assess shelters while it’s happening. Have to do it virtually or some way; have to change everything.
  - Shift towards an all-hazards approach based on the addition of COVID-19 conditions to hurricane season. One participant said that “preparedness for us [her agency] is preparedness for everything.”

*“..the coronavirus has made us a much more active county with planning and these are all new elements coming into our plans. The things that typically wouldn’t take such a hot seat are now moved to the front, so we’re discussing what are the PPE needs going forward, how will social distancing be maintained? All those are really COVID-19 related, but it’s all new planning endeavors for us.”*

*“So, we have our plans that are in place already, but right now, we’re working on expanding those including new courses of action as far as sheltering options, feeding options, evacuation options. Since we’ll be dealing with any sort of hurricane during this COVID environment, we have to focus a lot more on those non-congregate options as far as sheltering and then also, when it comes to feeding as well just to keep populations - keep that social distancing going on. So, we’re looking at a lot of different options, trying to look at a lot of unconventional things that maybe we haven’t done before in the past and then how that can apply with current federal law and current policies that are in place, and then what policies we can change, which ones we can’t change to better serve the populations.”*

#### **1.4.2 KEY CONSIDERATION 2: IMPLEMENTING PROTOCOLS FOR STAFF USE OF PPE AND FOR PREVENTING THE SPREAD OF COVID-19 DURING EVACUATION AND SHELTERING**

##### **Social-Distancing Policies**

- Assessing risk levels, mitigating risks, and using PPE.
- Brainstorming ways to stop outbreaks in shelter, prevention tactics for hurricane sheltering, and discussions with Departments of Health.
- *What does that look like with regard to PPE?* Stockpiling supplies for shelter workers and people who come to the shelters. Screening at the shelters and maintaining isolation areas will decrease footprint.
- Plexiglass moveable screens to protect those at registration areas.
- Implications of facial coverings for the hearing and cognitively impaired?
- Students on campuses during fall: *How to get students to other shelters and hotels and how to enforce social distancing?*

##### **Screening and Triage of Evacuees, Including Vulnerable Populations**

- Screening everyone who comes in (e.g., taking temperature and requiring masks).
- *But where do the people who are screened out [show symptoms of COVID-19] go?*

*“We have a risk versus consequence mentality in emergency management. We want to help everybody, but when it comes down to who can we really help in the next four hours, if we put a time stamp on it, who can we help in that 12-hour impact zone, we tend to want to shy away and say, ‘Well, we’ll help anybody that shows up,’ and that becomes a resource limitation challenge. It actually overwhelms the system because we can’t triage correctly ...we have to become more strategic in our thinking.”*

*“Prescreening is critical to understanding. So medically vulnerable may use O2 or nebulizers in there as a potential for aerosol virus particulates. Using structural barriers within our regional shelters as a physical barrier plus privacy screens.”*



## Transportation Issues and Concerns

- Transportation logistics: *How many, how often, what kind? Are they capable of transporting medically fragile adults or infants?*
- *How do we get our vulnerable population that may be in quarantine or may have tested for COVID-19 into different types of shelter facilities?*
- *Transporting students from university campuses to shelters?*
- Transportation logistics: Limits on occupancy means more trips and longer times.
- Medically fragile community members may be leery of using buses or other transportation modes.
- *When transporting people to and from shelters, will the buses be cleaned? Will a specific # of people be allowed on the bus at the same time? All of this creates cost, time and scheduling impacts.*
- *Can we use Uber or Lyft?*

## Strategies

- Using structural barriers as a physical barrier, plus privacy screens.

*“We have created plexiglass moveable screens to protect those at registration areas.”*

- Pre-screening used to provide for the vulnerable populations, not only based on their needs but on the resources available.
- Screenings: can't get into shelter until screened, temperature checks, covid testing, morning round check-in for mental health in shelters, with forms for people to self-report.
- Social distancing is being employed as a tool. There have also been the identification of isolation areas within each shelter and are working with our healthcare facilities to identify space for those who may show up sick or with temperatures. In addition to taking temperatures at the entrance we are asking specific triage questions.

### 1.4.3 KEY CONSIDERATION 3: ESTABLISHING CROSS-SCALE AND CROSS-SECTOR COORDINATION TO ENSURE ADEQUATE SHELTER STAFFING AND TO MEET COMMUNITY NEEDS

- Community needs are unusually high because of the COVID-19 pandemic.
- There is a generator that powers the entire block and we have logistics, water, food and partnership with the Salvation Army to feed the local communities when the power is out. As of now, there are four active emergencies in [our region]. The city and the county have not been responding unitedly in the emergencies.
- Access to services, food, and emergency items. (Example: Women with infants and their need for formula but Women, Infant, and Children [WIC] offices being closed from COVID-19 concerns.)

- Because of state shutdowns for the COVID-19 quarantine efforts, there are limited resources and need to explore expanded options (e.g., NGOs). This needs close monitoring to see how resources and capacity will be handled and pooled.
- Psychological health for staff, as well as evacuees, is a pressing challenge and will be going forward.

### Collaboration with Nonprofits and Health

- The nonprofits in [our county] are trying to prepare for the emergency but are oblivious about what local governments are doing.
- Nonprofits are also trying to provide training to volunteers.
- Information sharing has been limited in some places. (Example: NGOs need to know specifics related to shelter availability and capacity.)
- Lots of discussions with community stakeholders about how to shelter medically vulnerable, while balancing social-distancing guidelines.
- In some locations, social services agencies manage shelters in conjunction with health departments.
- Concerns about support from various level of government and other organizations (e.g., want and need more support from Departments of Health and Medical Corps volunteers).

### Staffing

*“Have we considered traditional paid and volunteer staff at shelters/elsewhere who may be COVID-vulnerable and hence not available for a compound event?”*

- We will need more hurricane response and shelter staff than typical.
- Many of the same staff that help during hurricane season or in shelters are the same workers helping with COVID-19 (e.g., EMS and law enforcement). Many working at Emergency Operations Centers (EOCs). They are tired physically and mentally.
- Possibility that mandatory shelter workers will choose to accept disciplinary action instead of reporting.
- New model: Regarding mental health and sheltering, paid to be present and active due to shortage of volunteers.
- *Consider hiring local people who are unemployed from the pandemic?*
  - *Will these people actually show up when they are needed?*
  - New staff and volunteers will create additional training needs.
- *Are there plans for digital volunteers?*
- Looking at partnering with American Red Cross.

### Other Issues

- Flooding and its impact on the community and the spread of illness.

## Strategies

- Virtual sheltering: American Red Cross has recommendations for minimal staffing backed up with virtual support. Working with mental health providers to provide mental health support using telepsychology. (Note: Refer to Section 3.0, “References and Resources” near the end of this report.)
- Use of tele-meetings and new remote technology can be challenging for populations who may not have access to technology or internet services.
- Power and service disruptions may also affect use of remote technologies.

*“There have been articles about staff returning to work in daycares. Many of those workers were making more with the additional \$600 unemployment benefit than they were working and they are safe at home. I think this type of issue could make hiring temporary shelter employees challenging especially given the additional risks during the pandemic”*  
(<https://www.npr.org/2020/05/26/861906616/when-returning-to-your-job-means-a-cut-in-pay>)

### 1.4.4 KEY CONSIDERATION 4: PUBLIC MESSAGING

#### Timing

- Lots of concern about how quickly the hurricane season is coming and how to prepare and distribute information fast enough.
- Policies being implemented need to be determined before anyone can start advertising them.
- *With the cascading impacts of hurricane and tropical storm winds and when is the appropriate time to tell others to evacuate?*
- More time will be needed to set up shelters and other services.

#### Sheltering and Evacuation Guidance

- Develop messaging that encourages all community members to shelter in a safe structure at home or with loved ones out of the area, if available.
- *We tell them to leave but where can they go?* (a long-standing issue)

#### COVID-19 Risk Communication

- Not enough concern or publicity on hurricanes and their impact during this time because everyone is more concerned with COVID-19.
- *In the context of reopening and reduction of social-distancing policies in some regions, how do we manage the situation?*
- People are fearful, and that is a reality. We are going to have to learn how to overcome that fear, especially in hotels. *How are people assured that they were cleaned properly?*
- People might be reluctant to come to shelters because of COVID-19; local and socially acceptable marketing will need to change that.

- In the past, a similar concern that dissuaded those who needed to shelter was pets in shelters. This was solved in the commenter’s community through:
  - Finding a way to allow pets so people would use the shelters,
  - Ensuring the pets would not bother other shelter residents, and
  - Using social networks and local advertising to inform people of the new policies.

### Strategies

- Large amount of information right now about COVID-19. Counties will need to “start mixing the message” with hurricane information; could increase potential for confusion.
- People keep saying “mass sheltering”, but the language needs to change based on the current pandemic conditions.
- Strategies used in sheltering during other disasters occurring during COVID-19 could be explored (e.g. one participant asked, *How did they shelter from wildfires in [Santa Rosa County] Florida?*).

*“One of the things that I typically do during blue skies is outreach for the special needs shelter program, and I do that for a lot of home health agencies and some of our hospitals in the area so reaching out to them for individuals who are elderly or at high risk who have medical conditions that are at high risk for severe COVID-19 complications. Home health agencies and hospitals tend to know a lot of them.”*

*“The way we word it to our registrants is ‘if you’re electric dependent or require oxygen, you should evacuate with Evacuation Zone A’ ... We do the same if they live in a mobile home, they should evacuate with Evacuation Zone A.”*

#### 1.4.5 GENERAL SUMMARY OF THE ROUND

States are in the beginning stages of hurricane season preparations. The major concerns are finding non-congregate housing options and staffing. Everything has been side-tracked because of COVID-19 – a lot of planning was done before the pandemic. Re-evaluating preparedness plans to have the ability to effectively approach the hurricane season and the pandemic. In order to have more shelters to accommodate smaller groups of people with more spacing, planners are exploring alternative sheltering options. Hotels and schools were the two sheltering alternatives most mentioned. Social distancing and wearing masks are also required in the process of providing shelter. Transportation is also a consideration. The price for shelter is becoming more expensive at an exponential rate. Staffing and PPE shortages are the biggest issues for government agencies.

*“Air circulation, air exchanges, air filtration or treatment within those facilities. So, we’re doing evaluations right now. If we expand our footprint in current facilities, which is typically schools for us when we do an emergency hurricane shelter, what is provided for HVAC systems and electricity in the expanded footprint versus the footprint that we have. We have some shelters that were developed to withstand rated categorizations of hurricanes and there’s only a portion of the facility so going back to the plans to figure out what the other portions of the facilities are. So, there’s a lot of engineering that goes into that.”*

## 1.5 ROUND TWO: WHAT ARE BEST PRACTICES FOR INFECTIOUS DISEASE MANAGEMENT IN CONGREGATE CARE?

### 1.5.1 KEY CONSIDERATION 1: CO-OCCURRING DISASTERS INCREASE THE NUMBERS OF PEOPLE WHO ARE VULNERABLE AND BROADEN THE WORKING DEFINITION OF VULNERABILITY

#### Questions and Comments

- Perceptions of risk differ across populations and geographic locations.
- Topics, concerns, and points that were brought up frequently: *Who is the first line considered as vulnerable? Is it age, mobility, medical issues?*
- We cannot rank vulnerable populations; they all have their unique vulnerabilities and require specific care.
- *How do you narrow it down when you are low resourced and there is a pandemic?*

#### Individuals with Disabilities, Complex Medical Needs

- Those with ongoing illnesses or underlying health conditions (e.g., cancer or heart disease) are more vulnerable now than before.
- Anyone, regardless of age, who is technology dependent, has disabilities or is dependent on health care staffing.
- People with physical, intellectual, or sensory limitations (deaf, blind)
  - Deaf community considerations include preparation for sheltering, use of sign language, and clear facial coverings (to be able to see mouths).
  - This population requires planning; disability rights individuals and agencies are part of the planning for sheltering to ensure we think about the detail and needs for accommodations.

*“Florida statute defines special needs as those with mobility issues, more complex medical issues that can be unmanaged in a general population shelter and those with cognitively impaired so it encompasses the medically fragile and crosses cultural educational, and socioeconomic lines. It also includes the medically fragile since they tend to need electricity.”*

## Vulnerable to COVID-19 Complications, Illness, or Underlying Health Conditions

- Populations at higher risk for complications from COVID-19 include:
  - Those who have contracted the virus.
  - Anyone immunocompromised. One suggestion was that anyone with medical complications should try to shelter in place because of the additional risks congregate sheltering may pose.
  - Elderly populations.
  - Children and the younger population with inflammatory complications that make them more likely to be more vulnerable.
  - Special-needs shelter populations who already have chronic conditions or are dependent on oxygen, for example, and are at increased risk for respiratory problems.
  - Those with chronic illnesses (e.g., chronic obstructive pulmonary disorder, cancer, and diabetes) who depend on medication or treatment and may not qualify for special needs shelters.
- In one represented state, the largest group of residents who have been becoming sick and dying from COVID-19 are 30–50 years old:
  - Have had restricted access to care and treatment under COVID-19.
  - Need medication, assistive technology, and medical care.
- The most complicated population is the medical population that is at home; no specific sheltering process made for this group (should be explored more).

## Emotional/Behavioral Health

- Some individuals have housing to shelter in place but have other vulnerabilities (mental health, addiction, etc.) that have caused them to fall through the cracks in terms of support during COVID-19
- Children’s mental health might be at risk.

*“[After hurricane Michael] many young people started committing suicide because they could not cope with having nothing or the loss of their parents, the loss of everything as they knew it ...psychiatrists, psychologists trying to help those kids, it was nil to none up there, so they were looking for people around other states and stuff to come in and help them deal with Baker Acting six-year-olds, 12-year-olds. Again, 10 a week. It was big.”*

*“Children don’t know how to cope with, number one, they’ve been inside now for two months, three months with the COVID-19. Then if you add a hurricane on top of that where they have that extra added stress, who’s looking out for them, where is it that we put some type of plan in place to deal with that type of stress with kids, with young people. So to me and as we always say, the children are our future.”*

## Pregnant Women, Infants, and Children

- Pregnancy plans for labor, complications, and newborn care.
- Children with asthma or allergies.

## Limited Income

Some populations are vulnerable in their limited shelter capacity and options. They live in storm-surge areas with unsafe housing and do not have the means to evacuate from the area.

- Financial difficulties, either existing or because of COVID-19. Participants discussed whether these would make people more or less likely to evacuate or seek shelter (evacuating is expensive, as is purchasing supplies to shelter at home). There was concern about people sheltering in unsafe locations, like cars, because of the fear of COVID-19 in shelters.
- The unemployed and the underemployed (low income workers) are likely to be at greater risk right now.
  - Cannot risk losing their jobs and do not have enough cash flow or reserves to get out of the hurricane or pandemic zones
- Do not have resources to recover (thus the recovery process is also different). This also includes those displaced in last two to three hurricanes who have not recovered from the last one. Those populations are still there, we do preparedness in the communities, what things they need to take with them. Making sure they are prepared beforehand, can be a traumatic experience to lose everything, making sure people are prepared psychologically.

*“Besides traditional ways to look at it, we’re in a situation where whole populations are vulnerable because of repeated disasters (three to four a year).”*

- Those who are uninsured and underinsured are also at risk. This population has grown due to COVID-19.

*“. . . focusing on the homeless population to combat COVID crises and hurricane crises. What flood zone are you in, can you evacuate, what kind of home do you live in, homeless, low socio-economic status . . .”*

## Homeless or Housing Vulnerability

- Geography: Some people consider all people in the path of a hurricane “vulnerable,” anyone in that first zone is considered vulnerable.
- Also vulnerable are those who live in housing that is not storm-resistant (e.g. mobile homes), those in flood or storm surge zones, and the growing population of those living with housing insecurities (e.g., “couch-surfing” or on the streets, in their cars, or in homeless shelters)
  - Mobile home communities and those who live in storm-surge locations need targeted outreach (e.g., trailers or recreation vehicles).

*“Those without safe housing will likely show up [in the shelters].”*

- Homeless population (congregate sheltering) they have started using hotels and planning groups are considering this for the hurricane season
  - Example: Unsheltered in downtown Seattle; addressing needs during COVID-19 when cannot safely distance, do not have PPE, and are trying to make ensure their safety as best as possible.

*Those that are in shelter in place areas but live in homes that are rented and not equipped to withstand a hurricane but are quarantining and don't have all the information or are too afraid to go to the store and seek supplies. People can fall through the cracks, so may need to take a stronger approach for outreach.*

### Other Social Vulnerabilities

- Racial and ethnic minority communities and people of color:
  - Native American, African American, and Latinx.
  - May live in disenfranchised or underserved communities.
  - Likely have experienced racism and may therefore distrust.
  - Farmworkers, migrant populations, and indigenous people have increased risk of COVID-19; majority live in overcrowded or mobile homes, have language barriers and reluctance to reach out for help from government resources; becomes a big issue for making sure that they are safe and able to get needed services.
- Mixed ages and genders: Men, women, and families sheltering. Elderly evacuees and families with young children who are knowingly impacted more and have a harder time with recovery. Additional considerations for shelters' size and capabilities in light of family members and caregivers.
- Safety for those experiencing domestic violence, abuse, and other forms of exploitation.

### Strategies

- General approaches:
  - Vulnerable population registries: Calls go out early to ask if they are going to evacuate. *For those who do not have family, where will they go?*
    - COVID-19 complicates this process
    - *What about those who do not report or register?*
    - Special-needs registries require advance contact “so you can come to them and they don't have to come to you”; otherwise, these individuals might not be able to access information they need.
  - Treating anyone who presents at shelters both as a potential carrier and a person at risk to complications from COVID-19; assume vulnerability.



- Must consider that vulnerable people who did not pre-register may show up, as well as those who are not vulnerable. *If the shelters fill, what will relocating look like (e.g., busing)? Should we make a prioritization list of vulnerable populations?*
  - Florida Sunshine Line (public transportation mode)
- Looking at COVID-19 and the needs that they have, whether non-congregate sheltering or anyone that is at risk. Make sure we are meeting ADA requirements, civil rights requirements, for everyone else. Sometimes those are cross-sectors.
- Using hotels, four types currently being considered: COVID-19-positive hotel, two hotels for vulnerable populations negative for COVID-19: elderly folk, mental health, and people facing homelessness.

*“Focus on coastal communities...Usually works with low capacity communities, small and/or rural. In our community already struggling with shelters, one of the counties I work with, their basic plan is to just get out of the county. Have a safe room which isn’t actually built to shelter people (pass-through). If people get there, the county puts them on a bus to get them out of the country. Needing more space/shelter with social distancing, this particular county doesn’t have any options. Don’t have a solution, small counties, rural counties: vacant stores are run down, no way for them to be shelter because they are not structurally sound to begin with. Trying to be on-call to bring back ideas to the community when already low capacity.”*

- Social issues:
  - The current pandemic made us much more aware of our vulnerable populations. We have been building relationships and trying to understand different cultural needs. We have been identifying influencers within the community to work with us to share knowledge of risks.
- Age groups:
  - Think of the children, ask parents to plan for the families, don’t often look at how children feel and what’s next for them.
- Health or disability conditions:
  - Look to the state statute that defines vulnerable populations for special needs shelters (SpNS); also look at guidance for SpNS to inform what general population shelters may need. (<http://www.floridahealth.gov/programs-and-services/emergency-preparedness-and-response/disaster-response-resources/spns-index.html>)
  - Special needs shelters accept those with medical conditions, who need a generator for medical equipment, medical monitoring, etc. All depends on the need of the person (often the same people at high risk of COVID-19) – this may encompass a larger segment of the population in 2020.

## 1.5.2 KEY CONSIDERATION 2: STAFFING ISSUES

### Workforce

- *How do we build resilience within our staffing?*

- Current staff and volunteers are already stretched thin due to COVID-19.
- *Guidance is in place, but how do we come up with shelter managers?*
  - *What does non-congregate shelter staffing look like?*
- County employees may or may not be activated for the natural disaster.
- Many employers and employees do not necessarily have a department with a central role in response (i.e. public works and fire rescue already have a role during a disaster).

*“I think the workforce in terms of emergency management, EMS, fire, law enforcement, all the same cast of characters are pretty much maxed out right now working 60, 70, 80-hour weeks managing and responding to the pandemic, and then as hurricane season now holds out, how do you divide and conquer and make sure you’re still taking care of business on all fronts.”*

### **Disaster Response and Shelter Personnel Have Greater Exposure to COVID-19**

- Personal protective equipment (PPE) needed.
- Shelters may have staffing problems because many volunteers are over 65. American Red Cross volunteers, shelter managers, some volunteers can no longer set up because the age definitions make them no longer eligible to volunteer.
- Concerns about the potential exposures in EOCs.
  - *How do we decentralize EOCs?*
  - Builds resilience because they aren’t so reliant on the primary EOC.
  - Multiple nodes, limited people to properly distance from each other.
  - People working from home for EOCs don’t have back-up generators.

*“Personal care assistance, usually we can bring folks into the shelters for those but do you want to expose personal care assistance, but at the same time, you’re still going to have that need. Other teams that come in, chaplains, spiritual health, spiritual care. The FAS team, as mentioned earlier, the Functional Assessment Support teams that assess people with disabilities and access and functional needs for resources and services that they may need to remain independent in the shelter, and other types of interpreters.”*

### **Training**

- Staff might not be trained to handle illness and hurricane-related issues simultaneously.
- Work with American Red Cross to use training components that are family friendly.
- Some counties have a software/portal – building information in (e.g. are pet’s shots up to date; if no, a link is provided to do so).
- Checklist of everything to provide/prepare.
- Training employees on how to help individuals get into registries.

## Strategies

- Staff are not designated essential/non-essential but are given a disaster role with an all-hazard approach. So we can keep employees employed (paycheck, economy), taking care and giving roles to stakeholders within the county.
- Training all employees (essential and non-essential employees) to know their role during an emergency: EERP (Emergency Employee Response Program, <https://www.ready.gov/business/implementation/emergency>).

*“So we are trying to be proactive and train our employees...that don't necessarily have a department-essential role (our public utilities, our public works, our fire rescue, they are what we call department-essential employees)... what the feeding role is, teaching them what the points of distribution, volunteer reception center... what their role is during that emergency. So maybe that will help another county in how do you now prepare when you don't have your volunteers.”*

Trying to train employees to know their role during an emergency. Still work with Community Organizations Active in Disaster (COADs), Community Emergency Response Teams (CERT teams), bring them in on the training also so they will be just as trained as the employee. Using Everbridge (<https://www.everbridge.com/products/mobile-apps/>)

- What about coordinating with big event companies (Like hotels) that provide staffing and medical trailers that are not operating during COVID-19 outbreak?”
- RV short term loan or donations for workers - see program “RVs for MDs”  
<https://www.facebook.com/groups/rvs4mds/>“

*We move people out of trailers, RVs and mobile homes first in a hurricane scenario. Hotels are a choice for evacuees to relocate to out of the zone. In Florida, many of our hotel/motel options are in evacuation zones so they are not an option. It's also used for disaster workers as well as evacuees already.”*

*“There are a number of hotels that are used for sheltering, but a lot of them are in areas ...that were closed down or required to close down if there were evacuations. Those that are left are a good option, I think, for sheltering maybe some of the vulnerable populations. We've been in meetings about this. The concern is getting people out afterwards. It's a legitimate concern that they have in getting people out of the shelter afterwards. That was the concern of even people who are paying. [Laughter] You imagine if people are not paying.”*

### 1.5.3 KEY CONSIDERATION 3: IMPORTANCE OF EFFECTIVE COMMUNICATION

#### Effective Messaging/Guidance

- Residents are not going to be prepared or want to evacuate:
  - They need to know what the options are and what safeguards are in place.

- What if disaster happens, school shelters open, and zero people show up because no one wants to be exposed?

### Access to Information

- Residents with English proficiency, isolation in specific communities, lack of access to technology.
- Typically do more hands-on type community meetings, now having to do Zoom calls for vulnerable populations.
  - Traditional modes of face-to-face outreach not possible with COVID-19 (e.g., shift to online and media communications).
  - Rural counties have issues with high-speed internet and infrastructure.
  - Many individuals do not have reliable access to internet or cellular services.
- For people living with dementia and their caregiver's mental health is a main concern (e.g., knowing what will happen and their ability to enter the shelter). Many are not aware of special-needs shelters, where to go, or where to pre-register.

### Strategies

- Workgroups are necessary to see what spacing and resources are needed.
- Risks vs. consequences mentality in emergency management:
  - If we let everyone just show up, there are resource limitation challenges.
  - We need to be more strategic with our thinking.
  - This is why we need to define vulnerable populations.
- Smaller counties make use of memoranda of understanding (MOAs), with larger counties that have an American Red Cross chapter.
- Community members and small business owners as resources. (Example: A younger woman who owns a local boutique also serves as a volunteer coordinator for two smaller counties. She motivated volunteer participation from community members by appealing to their interest in disaster preparedness.)

#### 1.5.4 GENERAL SUMMARY OF THE ROUND

Across all groups there is a recognition that the COVID-19 outbreak presents new vulnerable populations; however, there was less agreement over what constitutes a vulnerable population. Groups had a general consensus on broadening ideas of “vulnerable” to include those at higher risk from contracting coronavirus and adjusting the use of general population versus special needs shelters accordingly. Vulnerable populations may also be determined by geography (i.e., flood zones), as well as the ability to evacuate (e.g., financial and transportation access, and other mobility issues). It was acknowledged by some that there needs to be a specific definition of vulnerable to make the best use of often limited resources.

For those outside of the evacuation zone, it is necessary to assess who can safely shelter in place (e.g., based on housing security and quality, and socioeconomic and health status). Among shelter

evacuees, vulnerability to COVID-19, as well as other health and social vulnerabilities were discussed, including the vulnerabilities associated with racial and ethnic discrimination that has created excess hardships, disenfranchisement, and understandable mistrust on behalf of people of color. From a health perspective, vulnerable populations include anyone at high risk for COVID-19 exposures and complications, as well as those who are at risk for morbidity or mortality associated with disaster conditions (e.g., power outages and limited access to health care). Effective communications are needed to provide effective public messaging and clear guidance, and to reach those who have limited internet or media access or limited English proficiency.

## 1.6 ROUND THREE: ISSUES IMPACTING VULNERABLE POPULATIONS

Issues related to impacts on vulnerable populations revolve around several key questions:

- *Do we know how people will make decisions on whether to evacuate or shelter, and how they feel about congregate vs non-congregate shelters?*
- *How do we encourage residents to plan and prepare? How to communicate and distribute accurate and timely information to support planning and preparedness?*
- *What are the resource constraints and how do they impact residents and organizations?*
- *Where and how do we place vulnerable groups who decide to shelter?*

The discussion raised more questions than answers, and few strategies emerged for addressing the issues associated with these questions.

### 1.6.1 KEY QUESTION 1: DO WE KNOW HOW PEOPLE WILL MAKE DECISIONS ON WHETHER TO EVACUATE OR SHELTER?

- *Will people have enough trust to go to shelters? Need to address uncertainty people have about the conditions of shelters and how we are protecting their health.*
- *There is also a hesitancy to evacuate because of the lack of trust in authorities for some populations. e.g. What impact does public confidence in government have on compliance with evacuation orders?*
- *Hoping that people out of vulnerable areas pre-landfall. Will need to ramp up planning for pre-landfall decisions. Don't want to be stuck with people making decisions in landfall situations.*
- *With COVID-19, the mental process for most people is that the last place I want to be is in a shelter. But vulnerable populations may approach sheltering differently. Are they more or less concerned about being in a shelter?*
- *Different vulnerable populations make decisions differently. Medically fragile community members may feel at risk in shelters or about sharing transportation because of exposure risks.*
- *Some people might just stay home. People may be torn between do we go, do we stay. What is their mental health going into it?*

*“Transitioning from ‘stay home’ to evacuating is hard for many people to comprehend.”*

- *Will people follow instructions and listen? Will people follow the warnings and evacuation orders?*

### Strategies

- We plan for the worst, hope for the best. We prepare for a disaster: having to shelter the same amount with a COVID-19 outbreak. Encourage most residents to evacuate to a stable environment with family and friends. But, at the end of the day, if nowhere to go, the shelter is it.

*“Work with non-residential agencies such as home health agencies/nurse registries and senior centers who touch these populations to increase our understanding of their needs/fears/gaps.”*

## 1.6.2 KEY QUESTION 2: HOW DO WE ENCOURAGE RESIDENTS TO PLAN AND PREPARE? HOW TO COMMUNICATE AND DISTRIBUTE ACCURATE AND TIMELY INFORMATION TO SUPPORT PLANNING AND PREPAREDNESS?

### Emphasis on Individual Personal Preparedness

To mitigate exposure, emphasis on individual preparedness as a safer alternative to relying on the government will be important:

- People need to have their own personal plan; it is essential this season.
- Encourage people to develop their own evacuation and sheltering plans but recognize that there are few options for those with limited income and resources.
- Concerns about limited preparedness supplies for residents. Restricted number of people allowed in stores at a time. Some supplies are short and want to avoid creating runs on already scant supplies (e.g. toilet paper, hand sanitizer, and bottled water).
- Need to let people know when to start preparing (i.e., now), so that everyone has the opportunity to obtain supplies for emergency preparedness, such as sheltering in place.
- Participants expressed concern over residents’ low information or confusion about where to go and what guidelines to follow.
- Some will not want to leave; may rationalize based on prior storm non-events, relying on a mentality that if it did not have an impact before, why believe it will this time? However, in some regions the most at-risk zones have manufactured housing (i.e., less structural integrity for higher-category storm events).

### Evacuation

- Transportation challenges during evacuation. Limited numbers of folks with accessible transportation. Limited number of people per vehicle.
- Limits on public transportation occupancy means more trips, longer time to evacuate an area. e.g. *Do we evacuate earlier? For public transportation, do we need more staffing for certain routes?*

- Traffic-control points can be a big issue when people are evacuating. Some of the mid-Atlantic and northern states are gateways to evacuees' targeted destinations.
- Creates a significant financial burden if a family has to evacuate and pay for transportation, hotel, and food.
- Shadow evacuees: People who can safely shelter at home but evacuate for convenience or comfort can drain hotel capacity and also clog evacuation routes for those who must evacuate for safety reasons.

## Public Messaging

- Residents need to know where to go, who to call, how they will be kept safe from COVID-19, what the exposure risk is, and what has changed since last year.
- *How do you craft an appropriate message for the range of populations impacted?*
- Need to be extremely consistent because people are confused; mental preparation is especially important this season.
- People need to be able to differentiate between good and bad sources of information. Need to make sure there are trusted sources of information.
- Increased communications may involve devising pathways for reaching people who may be scared and frozen in place. Need to continually attempt outreach with consistent messaging and new solutions.
- Diverse audiences: Not one-size-fits-all—need to cater to the audience.

*“Tailoring the message to be culturally, educationally appropriate and understandable continues to be a challenge.”*

*“A very Gen-Z approach, actually. Just as you would look on social media, Instagram, or Facebook, you have influencers that connect to a component of a population or a very specific culture. So, we, through our Health Department and other sources in our community, multi-cultural centers working in the region, found folks that are from that culture, from Hispanic, Creole, Haitian-Creole cultures that would work with us, offer their translation services, but also offer a bridge. Not only translate the language, but translate the ideas and the importance of hurricanes, coronavirus, and testing. So, they've really worked and done phenomenal to bridge that gap. Again, there's a lot of peculiarities on what they believe and customs, so it was finding those folks in the community that could get you in, build the trust and then from there, that relationship kind of takes off on its own.”*

## Strategies

- Giving people debit cards with \$100 so that they have gas money and some extra to evacuate. American Red Cross has done this before, but case work is intensive and takes a lot of time

- Share preparedness information broadly, especially what changes result from COVID-19. If changing the message about evacuation/sheltering, we need to make sure those messages are being translated into other languages.
- Baltimore City, MD created resilience hubs throughout the city as places to distribute information and supplies to communities. They are often churches, but could be community centers, senior centers, or other similar types of locations.
- Trying to prepare information sessions/trainings to look at information sources and how to identify reliable or trusted sources.
- Work with partners in education on how to communicate with different audiences.
- Being clear on the language we use and differentiate between communications targeted at other professionals and organizations, as well as the public.
- When going into different communities or different areas, don't rely on one standard presentation, stick to the relevant point for that community or area.
- Try to give steps 1, 2, 3 and action information.

### 1.6.3 KEY QUESTION 3: WHAT ARE THE RESOURCE CONSTRAINTS AND HOW DO THEY IMPACT RESIDENTS AND ORGANIZATIONS?

#### Residents

- Lack of income and resources are major barriers
- Economically challenged individuals; numbers are growing and there needs to be a way to consider them. Increased homelessness, job loss, and often nowhere to go if a hurricane comes.
- *How will those without jobs manage daily, not even considering the added threat of a hurricane?*

#### Organizational Resources

- “Lack of funding for organizations as this [COVID-19] drags on.”
- Financial resources and strategic supply have been used for COVID-19; will the same resources be available for a storm event?
- General supplies are low during this time, top that off with a hurricane and it will be more chaos
- Low supply of food, water, and medications.
- *Do we have stock of specialized supplies for vulnerable populations (e.g., PPE and oxygen tanks)? Can we replenish?* NPR ran a story on how the dental sector donated PPE to the COVID-19 response and faced challenges getting replacements.



*“...we established thresholds for canned food as well as water and soap, everything. We established those a long time ago. Well now, when it comes to hand sanitizer, we have thresholds however, we’ve also broken those thresholds and there’s really no end in sight on that and so, we are looking at everything from masks and hand sanitizers, soap, everything. ...a challenge is we don’t know what is going to be available in the next month or even the next two months. [including PPE]”*

## Staffing

- *Do we have enough staff? Who will staff the shelters? Will it affect the ability to respond to disaster in many areas?*
- Some health departments have lost funding, laid off staff, and are under hiring freezes.
- Insufficient American Sign Language (ALS) interpreters.
- Will likely need more volunteers, even as volunteer willingness may be hampered by fear of contracting COVID-19.
- Medical Reserve Corps and American Red Cross volunteers are already tapped. *How much can we rely on them?*
- COVID 19 exhaustion: Physical and mental health effects. Many staff and volunteers are already tired; participants expressed concerns about burnout.
- *How do we recruit more volunteers who are qualified to work with vulnerable populations in shelters?*

## Strategies

- Have regular check-ins through Zoom to ensure staff is staying healthy (e.g., taking care of ourselves so we can take care of our clients).
- Continuous communications with staff to ensure their well-being and enable them to fully participate and engage their expertise.
- Emphasize self-care to ensure stability of existing workforce.

### 1.6.4 KEY QUESTION 4: WHERE AND HOW DO WE PLACE VULNERABLE GROUPS WHO DECIDE TO SHELTER?

Emergency planning needs to address how to transport people to shelter and how to provide shelter within social distancing parameters.

## Sheltering Procedures

- Transportation and getting to a shelter – none or limited public transportation, social distancing within a bus
- Temperature checks?
- Touchless registration via digital check-in
- Register through local emergency management agency for sheltering; web based EOC was used to document this process.

## Risks to Staff, Providers, and Volunteers

- Risk of exposure to people who support the shelter and vulnerable populations (e.g., chaplains and others providing spiritual health care, interpreters, support teams, and personal care assistants).
- *How do we quell fear among shelter staff?*
- Do not want to expose staff, but need remains. *What are the consequences if they are not part of the response due to COVID-19 considerations?*
- PPE for shelter employees for them to protect themselves (and for those vulnerable to infection or who are infectious).
- *Do shelter staff require quarantining after serving in a shelter?*
- *How do we address liability for volunteers in the face of infection or possible infection?*
- Technology can increase access because we have and will be doing a lot of things remotely and virtually. Extra reliance on that technology during hurricanes but can't always guarantee that will have access to internet, power, etc.
- Issues with security at shelters if more places are opening, the more sites open, the greater the risk of there being a safety concern

## Concerns Regarding Specific Populations

- Pregnant and postpartum women:
  - Ideal to have a mental health counselor available for pregnant and postpartum women in shelters.
  - Access to prenatal vitamins and staff to manage distribution.
  - Infants needing different sleep areas (especially if mother is COVID-positive); a private area would be needed. For nursing mothers who are using breast pump milk, would indicate the need for freezer capacity for breastmilk storage.
- For some medically fragile people who live at home with a caregiver, staying at home may be a safer option. They may not want to evacuate to congregate shelters because of COVID-19 exposure risks and may feel safer at home.
- Electricity-dependent population: Surge beds are used; evacuees arrive with their caregivers; many are down to about 35% capacity rate.
- People with substance abuse, addiction, and mental health disorders have added concern of possibilities of relapse. Shelters need to have enough Narcan and access to relevant medications.
- *How do we manage medication for people who need continuous care?*
- *How do we consider those with visual or speaking impediment?*
- Visitors and tourists normally require more hands-on interaction with shelter staff.

## Non-Congregate Shelters

- *If non-congregate sheltering is the goal, how does that actually look? How do you direct residents to non-congregate options?*
- We need to know from hotels now what their intentions are, their level of cooperation. It's a big decision for some of our localities and states.
- Who pays? Significant financial responsibility if families have to pay. Some districts are trying to pay for designated hotels in case they are needed.

*“[State] has not traditionally utilized hotels/motels for sheltering. What is the likelihood of a hotel/motel used in this capacity incurring negative publicity/stigma if an outbreak arises? Does this open a locality or state to additional claims regarding lost business in the future? Is there a way, assuming hotel/motel availability, to incentivize individuals/families to evacuate to these locations without managing the site as a true shelter?”*

## Strategies

- Could use recreational vehicles (RVs) and medical trailers to assist in response (Example: RVs 4 MDs [<https://www.facebook.com/RVs4MDs/>])
- Update the special-needs shelter registries to include additional vulnerable groups based on COVID-19 conditions.

### 1.6.5 REMAINING QUESTIONS

- *What type of evacuation conversations do case workers currently have with clients?*
- *How will different COVID-19 phases, rules in different communities, and different shelter plans impact residents?*
- *Could fear of flying or travel result in an increase in numbers presenting at shelters?*
- *Are vulnerable populations going to be different in how they think about sheltering? Even more concerned about going to a shelter?*
- Home-visiting services reach vulnerable and isolated populations and have been virtual since the pandemic but will be extremely difficult to expand. *How does this work during a hurricane?*
- *How can faith-based groups assist with sheltering, feeding, and visiting?*

### 1.6.6 GENERAL SUMMARY OF THE ROUND

There was recognition that with the hurricane-pandemic compound threat, everyone is vulnerable. Vulnerability to the hurricane and vulnerability to COVID-19 collide, making it difficult to determine appropriate steps. Evacuation and sheltering strategies are driven by the definition of who is vulnerable to COVID-19 and vulnerable in disaster situations, and the overlap of the two populations. There is greater emphasis on encouraging and highlighting the need for personal preparedness as a safer alternative to relying on government assistance.

Consistent messaging, targeted communication for different audiences, reliance on trusted sources of information, and timing of communications are critical for effective communications. Impacts on

vulnerable populations are interrelated. With COVID-19 there will be a need for more shelter sites, which creates additional and corresponding staffing and volunteer needs. The economic impacts of COVID-19 have reduced the capacities and abilities to respond for agencies, organizations, and individuals.

## 1.7 ROUND FOUR: 2-MINUTE QUESTION BURST

### 1.7.1 QUESTIONS RAISED

- *Where are we at with hurricane preparedness? Right in the thick of determining the sheltering arrangements, which in turn leads to a cascade of decisions regarding sheltering and evacuation timelines and staffing. Also, critical need for effective risk communications and directions to the public with focus on a newer, more expansive view of vulnerable populations.*
- *Based on projected storm impacts, what is the shelter plan for residential students? How to deal with calls from concerned parents? How are supplies being acquired? Will screen for testing be done at shelters? If so, what will be the plan for persons who test positive or are showing symptoms?*
- *How will COVID-19 affect our ability to use emergency management assistance compacts (EMACs) for sheltering?*
- *What about interstate travel and stop movement orders that are still in effect and will stay in effect?*
- *What are some innovative ways that we can think about non-congregate sheltering?*
- *How are we going to handle a dual-patient surge of infectious patients and injured patients?*
- *Can we use telemedicine or other platforms for engaging in our shelters with either medical needs or that virtual support?*
- *Who will be requiring staff or residents to wear masks? What type? Do residents need to bring them? Are we expected to provide them?*
- *What are policies on reaching the limit regarding the level of people in shelters?*
- *What about impacts of the opioid epidemic alongside COVID-19?*
- *Who do you shelter and who do you not shelter? Who is sheltered where?*
- *How do we get information to the most vulnerable who do not have a home?*
- *With decreased revenues for governments at all levels and the current increase in financial support coming from the state and federal governments, do we expect to see less support for future efforts?*

### 1.7.2 ADDITIONAL COMMENTS

- Need for hotel commitments.
- Importance of messaging: There is not yet messaging specific to COVID-19 and sheltering.
- Studies and data on transportation planning and routes estimation are available.
- Public health can provide population data, including vulnerable populations.

- Home health care nursing homes and group homes, as well as the hotel industry, should be included in future calls.
- For some communities, further north on the eastern seaboard, much of the anticipated need for shelter will be pass-through evacuees coming from further south along the Atlantic coast.
- Interested in data on impacts to sheltering projections based on economic impacts (e.g., 2010 data has estimates of what percentage are likely to seek hotels or stay with family). *What projections may be helpful in adjusting these numbers?*

## 1.8 REFERENCES AND RESOURCES

- Special-needs registries and transportation:
  - <https://www.hillsboroughcounty.org/en/residents/public-safety/emergency-management/action-folder/register-for-special-needs-disaster-assistance>
  - <http://www.floridahealth.gov/programs-and-services/emergency-preparedness-and-response/disaster-response-resources/spns-index.html>
  - <https://www.hillsboroughcounty.org/government/departments/sunshine-line>
- American Red Cross has a completely new method: congregate and non-congregate; however, congregate preferred.  
<https://nationalmasscarestrategy.org/wp-content/uploads/2020/04/ShelteringInCOVIDAffectedAreas.pdf>
- Telepsychology: <https://www.redcross.org/volunteer/volunteer-opportunities/disaster-health-mental-health-volunteer.html>
- American Psychological Association (APA): <https://www.apa.org/practice/programs/dmhi/>
- Emergency Employee Response Program:  
<https://www.ready.gov/business/implementation/emergency>
- Everbridge: <https://www.everbridge.com/products/mobile-apps/>
- RVs 4 MDs: <https://www.facebook.com/RVs4MDs/>
- Miscellaneous:
  - “Who is most likely to die from the Coronavirus?” (Serkez, Y. [2020, June 4]. *The New York Times*.)  
<https://www.nytimes.com/interactive/2020/06/04/opinion/coronavirus-health-race-inequality.html?fbclid=IwAR3wE07DINCZHIIpftwLd2UkZhw4TcPUpvBe2qIFMaFPHQucAWCVKo-2yZ0>
  - <https://www.npr.org/2020/05/26/861906616/when-returning-to-your-job-means-a-cut-in-pay>

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